

Chapter 3 Value Added Features of Trails

In the late 1980's the value of trails in the United States was beginning to be recognized on a national level. As early as 1985, President Reagan appointed a bipartisan commission to look ahead for a generation and determine how to meet the nation's needs for outdoor activities. That commission's report, *Americans and the Outdoors* (President's Commission on Americans Outdoors, 1987), recognized the increased problems and pressures on the outdoors. As a solution, the commission offered the following recommendation.

"Our communities can create a network of greenways across the USA... We can tie this country together with threads of green that everywhere grant us access to the natural world. Rivers and streams are the most obvious corridors, offering trails on the shores and boating at mid-channel. They could link open areas already existing as national and state parks, grasslands, forests, lakes, and reservoirs, the entire network winding through both rural and urban populations. Thousands of miles of abandoned rail lines should become hiking, biking and bridle paths. Utility rights-of-way could share their open space not only with hikers and cyclists but also with wildlife. Citizens and landowners, both individual and corporate, can look for opportunities to establish and maintain volunteer labor. Imagine every person in the US being within easy walking distance of a greenway that could lead around the entire nation. It can be done if we act soon."

Fewer things in the 21st Century development industry make better sense than combining community infrastructure along with quality of life amenities, especially those that accommodate pedestrian and bikeway needs of citizens demanding better health and fitness opportunities in their communities. Entrepreneurs and housing developments located along a network of linear green space corridors invite, entertain and engage citizens in an atmosphere that establishes a quality of life that will make Indiana a leader on the American landscape.

"Green Infrastructure" was coined to describe our Nation's natural life support system - an interconnected network of protected land and water



that supports native species, maintains natural ecological processes, sustains air and water resources and contributes to the health and quality of life for America's communities and people. Trails are a perfect example of green infrastructure that adds both quantifiable and non-quantifiable value to a community. Combining green infrastructure with built infrastructure under and over the ground creates a corridor system that provides countless benefits for those who live close to a trail, those who travel to use and enjoy trails and those who derive an economic benefit from a trail.

On the surface these corridors serve as greenway or bikeway trails emphasizing the human component tied directly to the health of local populations. Functionally, these corridors can also serve as emergency utility access roads. Utilizing existing, though no longer used, corridors can re-create opportunities for energy, information and opportunity to travel and flow to every town and city along these corridors. Consequently, valuable transit and utility corridors are not lost. They just evolve into a trail system that could have, just a few inches below the user's feet, an infrastructure of pipes and cables that will accommodate the flow of resources and commerce.

This statewide trails planning effort should address the needs and create a venue for citizens to become more active. As people grow more accustomed to having access to a developed trail network they will continue to recognize the value that such systems add locally and throughout Indiana.

Trails and Economic Development

Trails and greenways provide multiple benefits. Their primary value, of course, is the enjoyment they bring to people who use them. But they have many other advantages.

Because trails may attract people to rural or remote parts of the state, they have significant potential to serve as engines of economic development. Even new trails in an already developed area may heighten economic activity in the vicinity of the trail.



Here are some of the ways in which trails may spur economic development:

- They may increase property values near the trails.
- They may lead to greater tourism along the routes people take to get to the trails or in the region where the trails are.
- They may lead to new restaurants, grocery stores, bike shops, motels, camping areas and suppliers/renters/repairers of recreation equipment, or they may increase the traffic these businesses get.
- They may have a positive impact on the health of a community's citizens and therefore decrease health care costs for incoming business.

- Co-locating infrastructure along trail routes may free scarce public funds for other projects.

Trails have a positive economic influence. In 1992, the National Park Service studied three multi-purpose trails in California, Florida and Iowa. The annual combined economic impact of these three trails was found to be \$1.5 million.

Others have gauged the economic effects of trails and have come up with dramatic results.

- In 2001, PriceWaterhouseCoopers determined that a 201-mile section of a proposed trans-Canada trail system would create 170 jobs and increase the income in that province permanently by \$7 million U.S.
- The Little Miami Scenic Trail in Ohio has 150,000 trail users each year, who spend an average of about \$15 per visit on food, beverages and transportation to the trail.
- New trails have led to the economic revitalization of communities as diverse as Leadville, Colorado; Rockmart, Georgia; and Milford, Delaware.
- In 2002, the National Association of Realtors and the National Association of Home Buyers conducted a joint survey. In a list of eighteen community amenities, trails were chosen as the second most important.
- Home lots next to trails sell faster and at a 9 percent premium than homes do farther away.

Increasingly communities are realizing the economic aspects of quality-of-life issues. The ability of residents and visitors alike to 'escape' to a trail for hiking, biking, jogging, etc. is no longer seen as a luxury but as a vital component of what makes a particular location attractive and livable.

Trails are almost never created predominantly for the purpose of increasing the economic vitality of a region. But they almost always have that result.

- In 2004, the Indiana Chamber of Commerce named Muncie, Indiana Community of the Year because of the city's development around its downtown – including \$12 million (mostly in federal dollars) devoted to hiking and biking trails accessible near the downtown.
- A 2001 study of the Rivergreenway Trail in Fort Wayne revealed that the average user of that trail spent \$1,350 a year in connection with using that trail. The same study showed that half of those who used the trail fell into two categories: industry/technology/trades and business/clerical/management.
- Bloomington, Indiana recently acquired a rail line that the city will convert into a paved urban trail in order to revitalize the arts district and, with it, create a more vibrant downtown.
- The Monon Greenways Trail that stretches sixteen miles from Indianapolis to Carmel is a model combination of the rails-to-trails concept with economic development. Bike shops and cafes line parts of the trail. The trail goes through the artsy community of Broad Ripple through open country into the sophisticated environs of Carmel with easy access to parks, a shopping center and a farmers market.
- In February 2006, a software manufacturer from Muncie announced that it was moving its operations to Yorktown. Even before the move, the company had drawn up plans to provide scenic amenities that it knew would be of value to its employees: a park and a walking trail.



Trails as Alternative Transportation

Providing for alternative transportation is often touted as one of many trail benefits. Before looking at the role trails can play in providing alternative transportation it may be helpful to note how bicycle and pedestrian commuting has typically been measured in the past. Commuting is often mistakenly thought of as simply the journey to work. The latest Journey to Work Survey by the U.S. Census Bureau in 2000 found 3.3% of workers rode bicycles or walked to work. However, the National Household Travel Survey in 2001 reported that journey to work trips only comprise 15% of all trips. In other words, 85% of all travel is trips other than to and from work. Accordingly, it makes sense to consider all types of trips when assessing the level of commuting done via trail.

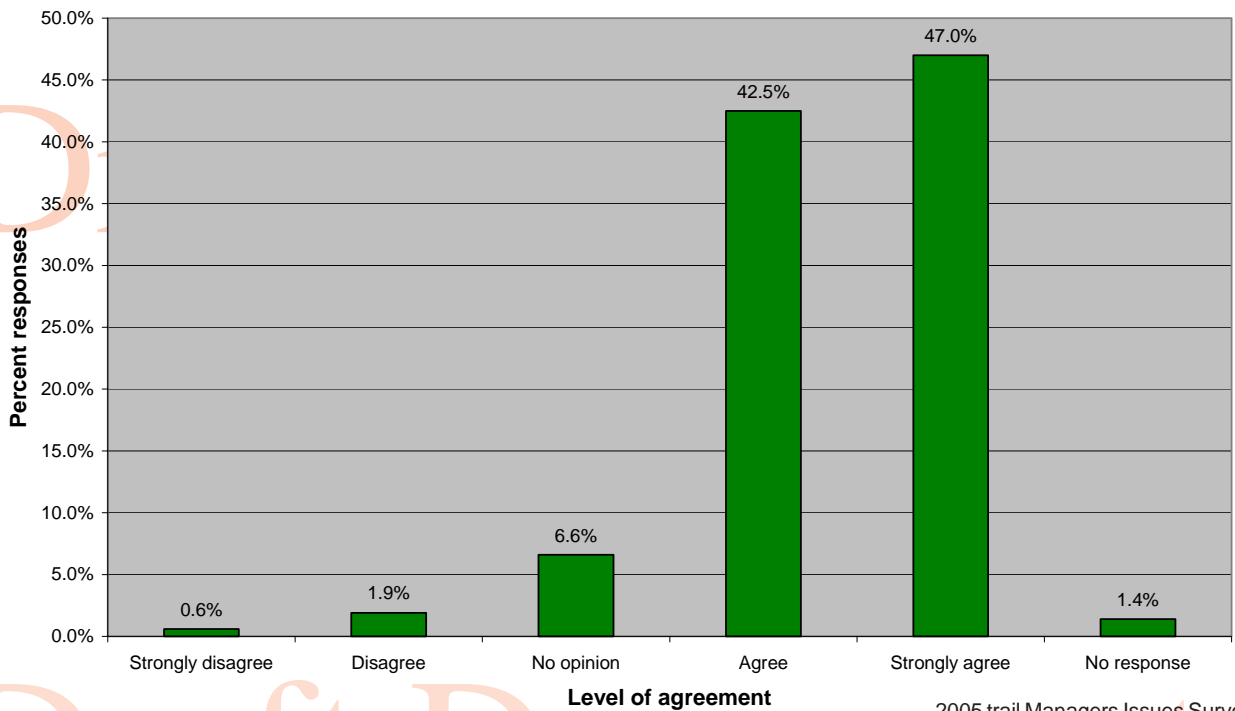
Although further research is necessary, initial studies show significant use of Indiana trails for alternative transportation. In January 2002, The Indiana Department of Transportation (INDOT) released the Indiana Trails Study, the most comprehensive evaluation of trails in the state to date. A summary of the study is available on INDOT's website at <http://www.state.in.us/dot/projects/trails/index.html>. This study of six Indiana

trails found that 5% of visits to the Monon Trail in Indianapolis were for the main purpose of commuting. Another 15% of Monon Trail visits were for a secondary purpose of commuting or running errands. In other words, approximately 20% of trips resulted in some type of commuting. With a monthly visit count of 25,000 on the Monon Trail in Indianapolis, this would translate to 5000 commuting trips per month. Since 2002, the Monon Trail has been extended five miles to the north through Carmel and 3 miles to the south near downtown Indianapolis. Also, the Fall Creek Trail has since been connected to Monon Trail. These extensions and connections have greatly increased the potential for commuting on the Monon Trail.

There are several factors that could influence the level of commuting done via trails. Provision of sidewalks, bike lanes and other street related amenities is important for bicyclists and pedestrians who are trying to safely access a trail. Trail connections to transit and bike racks on buses and trains could encourage use of trails to access the transit stop or station. Destination amenities such as bicycle parking and shower/locker facilities also make it easier to choose bicycling and walking to

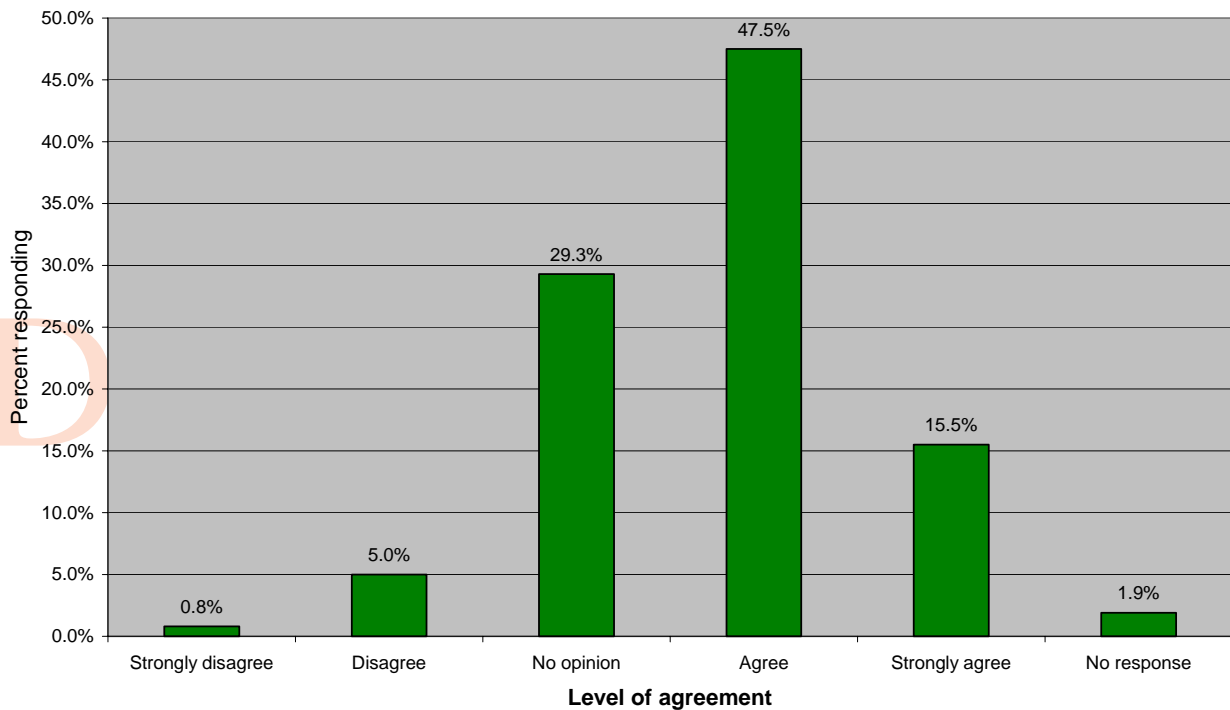


Roadway improvements that incorporate bicycle/pedestrian facilities are important for trail expansion and providing modes of alternative transportation



2005 trail Managers Issues Survey

There needs to be a coordinated effort between trail development and public transit services to provide viable transportation alternatives



2005 trail Managers Issues Survey

work. In addition, incentives for alternative transportation commuters and disincentives for auto commuters could encourage more commuters to hit the trail. Conversely, limiting speed or allowing only daylight use on trails could reduce the level of trail commuting.

INDOT became increasingly attuned to the needs of cyclists and pedestrians in the mid-1990s, adding the Indiana Bicycle and Pedestrian Facility Planning and Development Plan to the statewide multimodal transportation plan. Now more and more INDOT projects feature improvements unheard of ten years ago. INDOT incorporates sidewalks, separated multi-use paths, concrete pedestrian underpasses and widened shoulders in many of its projects to accommodate pedestrians and bicyclists. Secure and convenient bicycle parking allows employees and visitors to state offices to exercise their travel options. In 2003 INDOT and the Department of Administration purchased and installed bicycle parking racks at the Indiana Government Center.

Initiatives supporting sustainable development, smart growth and livable communities are fueling interest in bicycle and pedestrian travel. A renewed emphasis on walking and the need for physical activity makes sidewalks mandatory in many new residential developments. More bridges in urban areas are designed with walkways to facilitate pedestrians. Cantilevered walkways can be added when bridges are reconstructed. Curb ramps in cities and small towns improve access for people with disabilities and the elderly, wheelchairs and baby strollers. Pedestrian overpasses will soon permit safer crossing of major roads in communities



like Bloomington, Fort Wayne and Evansville. With the growth in bicycling, the need for bike racks on buses has also grown. Hammond, Fort Wayne, Lafayette, Bloomington, Columbus, Evansville, Muncie, Indianapolis and the Louisville area transit system mount bike racks on their buses. Tunnels provide grade-separated access for pedestrian and bicycle use in Columbus, Schererville, Merrillville, Carmel, Delphi, Portage and Indianapolis. When new highway bridges were built across the Wabash River in Lafayette and the White River in Indianapolis, the old bridges were converted to accommodate pedestrians.

Improvements that encourage bicycle and pedestrian commuting are supported by the 2003 Surface Transportation Policy Project. The Project makes note of a finding by the National Household Travel Survey in 2001 that 61% of trips under a half mile distance are made in a vehicle. On the other hand, the Surface Transportation Policy Project reports that a national poll in 2003 found 66% of Americans chose public transportation and walkable communities, rather than new roads, as the best long term solution to traffic congestion. The Project also found that 74% of Americans want their children to be able to walk to school safely. So, from an alternative transportation perspective, it appears there is strong public support to continue to invest in trails and related facilities.



Trails and Tourism

Tourism in Indiana is big business. Annually, the tourism industry brings in approximately \$6.7 billion in spending from 58 million leisure visitors—people who travel at least 50 miles to reach one of Indiana's many destinations (this figure does not include the hundreds of thousands of people who travel as part of conventions or on business). Tourism contributes to a diversified economic base, and visitor spending creates nearly 100,000 tourism-related jobs each year. The effects of visitor spending within local economies reach not only traditional tourism entities, but other businesses as well, including gas stations, restaurants and grocery stores. Over the past several years, Indiana's leisure market has grown at a rate higher than the national average.

Outdoor recreation is one of Indiana's major forms of tourist attraction. Brown County State Park is the nation's most visited state park. Sites like the Indiana Dunes National Lakeshore are well known tourist attractions. According to Strategic Marketing & Research, 54.9 percent of leisure travelers to the state enjoy scenic beauty while visiting. Tourists visit lakes, rivers and other natural features 40.7 percent of the time. Nationally, top leisure activities include outdoor at 12 percent (3rd highest), rural sightseeing at 11 percent (4th highest) and visiting a national/state park at 8 percent.

Trails are an increasingly important aspect of outdoor recreation industry. In 2004, the Office of Tourism awarded \$75,000 to the National Road Heritage Trail (NRHT), Inc and Indiana Trails Fund to help create a trail development guide. The resulting 9-volume NRHT Development Guide is an important resource for the state, the 8 counties, the 30 communities and countless citizens' groups along the proposed route of the 150-mile National Road Heritage Trail. The guide provides the background information and context with which to launch or modify greenways development plans in order to create a continuous, interconnected network of bicycle and pedestrian facilities across the width of the state, including equestrian facilities for much of the route. Other examples of the evolving connection between tourism and trails include the recent winter hikes in Brown County State park organized and promoted by the local Convention and Visitors Bureau and the feature article on the American Discovery Trail in the 2006 Indiana Travel Guide.

The value of tourism goes beyond the jobs it creates and the dollars that visitors spend staying in Indiana hotels, dining in restaurants and visiting attractions. Tourism has a direct impact on the quality of life for Hoosiers by creating stronger communities and offering unique experiences. The driving motivators that influence visitor travel are often the same factors considered by Indiana residents and potential residents when choosing where to live.



Trails as Co-located Infrastructure

There is another opportunity that future trail developers could utilize to implement trail networks on a state wide level. Co-locating trails and infrastructure in the same corridor could serve a dual purpose. It could combine utility corridors with trail. This concept could be expanded to connect towns throughout rural Indiana for sharing services such as waste water treatment. A facility located in one community could serve several other cities and towns in the region by developing a collector system of infrastructures under old rail beds.

Many towns were founded originally along these lines and they could be used to revitalize smaller communities throughout Indiana. Waste water facilities in one community and fresh water facilities in another could support an entire region at a fraction of the cost communities now spend having to development and maintain there own facilities.

Reducing inefficiencies associated with communities duplicating the same services could be a significant cost saving measure at the local level. Reconnecting municipal infrastructures through a corridor along the old rail or other utility corridors could set the tone for Indiana communities to attract new business developments. Easy access to fresh water supply, sanitary disposal, fuel, high speed data connections and other resources would be augmented by a higher quality of life for prospective employees.

For example, in 1989, a lift station on the north side of Marion County failed, dumping millions of



gallons of raw sewage into Williams Creek and the White River and resulted in a massive fish kill. That incident prompted the Environmental Protection Agency to require a new interceptor sewer system be built to serve the entire north & central regions of Marion County. This needed project had been postponed for years because there were no funds to build it.

Concurrently, the Indianapolis Department of Metropolitan Development was negotiating for 10.5 miles of the old Monon rail corridor that ran through the north central center of Marion County. Within days of the corridor being secured by the city, a quick engineering study was completed. A 48-inch sewer main was co-located under the old Monon rail bed in record time and for a fraction of the cost of locating the main sewer line under high traffic streets. The list of other co-located utilities along old rail corridors and greenways has grown throughout Indiana and includes fiber optic cable, cable TV, sewer lines, water, gas lines, high speed internet, power lines and live steam from the solid waste recycling burn facility.

As manufacturing of alternative fuels expands in Indiana there are growing opportunities to utilize this network of facilities to further develop trails. Trail systems could be built over and alongside an infrastructure of pipes and cables that accommodate the flow of resources and commerce. Pumping corn slurry from the northern Indiana farms to refineries and on to waiting markets will require expanding the network of existing utility corridors beyond those currently available. Additional above ground space for trails could be created based on the model of the railroads 150 years ago that launched Indiana and the United States into world leadership as it towered over the 20th century.

With all of these utility corridor opportunities availing themselves to the development of trails, careful planning is necessary to make sure the trails that are developed will serve their respective populations effectively. Building trails for the sake of trails is an ideal. However in these days of reduced government spending and concern for government waste, building trails near populations that want and will utilize the networks to their fullest extent will provide the biggest return for the trail dollars spent.

Trails Supporting the Indiana Strategis Initiative in Biofuel and Agriculture



Indiana Health By the Numbers

In recent decades the Centers for Disease Control and Prevention (CDC) have reported dramatic increases in the number of Americans who are overweight or obese. Both adults and children across the country and in the State of Indiana have recorded drastic negative changes in health indicators that contribute to a host of preventable chronic illnesses. Those illnesses have a profound effect on quality and length of life and cost individuals, businesses, and the State billions of dollars each year in health care expenditures. Those often preventable conditions, positively impacted by physical activity are:

- Hypertension
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Some cancers (endometrial, breast and colon)

Overweight & Obesity Trends

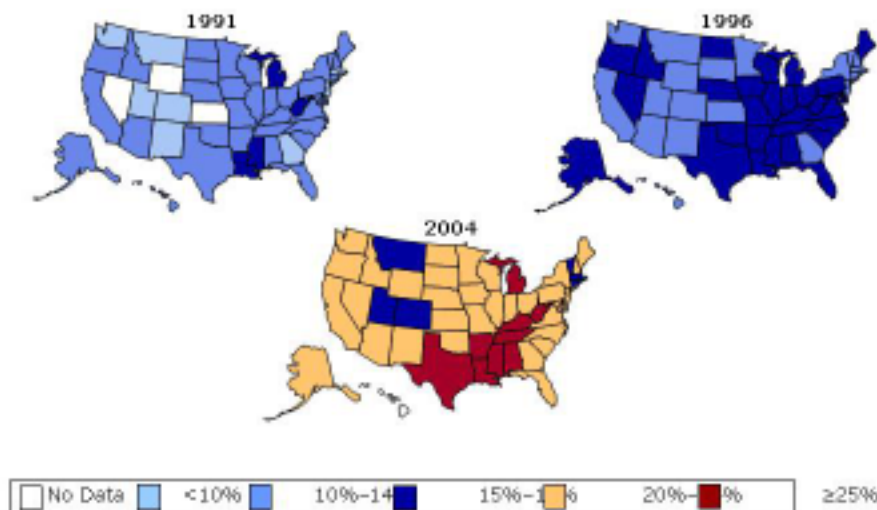
In recent decades there have been large increases in the incidence of overweight and obesity in the United States and the State of Indiana. Using the Body Mass Index (BMI), a number based solely on a formula using height and weight, the prevalence of overweight, those with a BMI of 25.0-29.9, and obesity, those with a BMI over 30, has grown significantly.

In 2002, 37.0 percent of Americans and 37.2 percent of Hoosiers were considered overweight while 22.1 percent of Americans and 24.1 percent of Hoosiers were considered obese. Over 60 percent of Hoosiers are considered overweight or obese, a significant increase from 46 percent in 1990. For children, between 2003 and 2005 the percentage of overweight students in Indiana rose from 11.5 percent to 15.0 percent.

Obesity Trends* Among U.S. Adults

BRFSS, 1991, 1996, 2004

(*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person)



According to the U.S. Department of Health and Human Services report *Physical Activity Fundamental to Preventing Disease*,

“Encouraging more activity can be as simple as establishing walking programs at schools, work sites and in the community. Some communities have an existing infrastructure that supports physical activity, such as sidewalks and bicycle trails, and worksites, schools, and shopping areas in close proximity to residential areas. In many other areas, such community amenities need to be developed to foster walking, cycling, and other types of exercise as a regular part of daily activity.”

U.S. Department of Health and Human Services. Physical activity fundamental to preventing disease 2002 June 20. Available from URL: <http://aspe.hhs.gov/health/reports/physicalactivity/>

Physical Activity

Physical activity directly impacts the incidence of obesity and related conditions that effect health and quality of life. Simply engaging in 30 minutes of moderate physical activity at least five days each week is sufficient to result in health benefits. Moderate physical activity includes walking, hiking and other activities easily accessible in park and recreation areas statewide.

In 2004, 22.8 percent of Americans and 25.3 percent of Hoosiers reported no physical activity in the past month. Only 46 percent of Hoosiers engage in a sufficient amount of physical activity. The statistics for children are also alarming. In addition, to the startling overweight numbers, only 28.2 percent of ninth graders in Indiana take part in daily physical education instruction, which effects lifelong health habits.

The CDC's *Guide to Community Preventive Services* recommends creating or improving access to trails and other venues as a way to address this problem. These assets, combined with effective community educational outreach efforts inspire increasing physical activity in the population. CDC studies have shown that this strategy can increase the number of individuals who engage in the recommended amount of physical activity by 25 percent.

Financial impact of Health

The financial impact of physical inactivity is staggering. Recent data from Active Living Leadership, at San Diego State University, estimates the total cost of physical inactivity in the state of Indiana to be almost \$7 billion annually, with most of this burden coming in the form of lost productivity. It is also estimated that if five percent of the Indiana population became physically active, the cost of this burden would be reduced by over \$300 million each year. If Indiana improved access to trails for all of its citizens, Hoosiers could save hundreds of millions of dollars annually.

The role of recreation and trails in maintaining a healthy lifestyle

We need to re-create Indiana with recreation.

Over the years as Indiana's population has become more sedentary. Food portions have become super-sized and we have seen the health of Indiana citizens plummet. Indiana is one of the top states for obesity and its related diseases which include diabetes, heart disease, stroke, cancer and arthritis. What can we do about it? Recreate! Where can we recreate? Trails!

Public health physicians have noted that for many years, it's easier to motivate people to exercise than to get them to stop smoking or change eating habits. Wagging fingers and "don't eat this" or "don't smoke" gives a grim image. But when promoting walking, running, hiking, biking and more, it's easy to extol the joy of a healthy life-style.

So how do we encourage Indiana citizens to get In Shape?

One thing they need is infrastructure. One of the best exercises, especially for a previously sedentary person is simple walking. Studies have shown that when persuading people to walk there are three requirements - they need a place that is safe, that is convenient and that is attractive. Such are our state parks, state and local lands and public trails.



Walking on a broken sidewalk past parking lots and traffic does not encourage our citizens to get out and exercise. But when spring peeks around the window, migrating birds start to sing and ephemeral wildflowers color the ground, people will naturally want an opportunity to visit the natural lands of Indiana and celebrate the cycle of the seasons. They just want to have an opportunity to get outside.

Too many children are more familiar with the world wide web and have not experienced the sparkle of a spiders web covered with dew on a summer morning. How can we expect the next generation to protect the land or to even care about Indiana if all they know is the inside of a fast food restaurant and the entertainment on a screen? Children need to know the natural environment of the Hoosier state so they will choose to live here and care for the land of Indiana.

The benefits from exercise on our public lands goes beyond physical health. Nature has a calming effect on many of the symptoms of an increasingly crowded world. Neighborhoods with trees have less vandalism and graffiti. Surgical patients who look out on trees and nature heal faster. Long distance athletes can get renewal by running through a woodlands where the oxygen concentration is higher.

Trails also promote economic health. In today's information economy everything is connected. People and businesses can often locate wherever they want. And the draw to those entrepreneurial people that drive the economy is the quality of life in a state and town. When studies are done to determine the most livable towns of America they always look at much the same things - clean air, clean water, good parks and good schools. The Indiana State Parks - from the sands of the Indiana Dunes to the waters of Clifty Falls - are a major

Adapted from an essay contributed by:
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selling point for bringing people to Indiana. Thriving state and local park systems can attract entrepreneurs, retirees and families looking for a place to live and raise their kids. All these people may appreciate the sound of a thrush in the woodlands or the sight of a Monarch butterfly hovering over a field of wildflowers. Trails can be the thread that ties it all together

Trails and greenways also protect our environmental health. Clean air and clean water are essential to a healthy life. The forests and grasslands of public lands help clean the rainfall and return it to the underlying aquifers and streams. The greenery produces that miracle of photosynthesis that clears the air of toxins and produces fresh, clean oxygen. While the parks provide a haven for migrating birds and butterflies, trails and greenways provide the corridors for them to travel by.

And don't forget social health. In today's fast paced society we need time and a place for social interactions. There is a need for third spaces in our world - places that are not work and not home where people can gather away from the noise and frantic pace of the city. When we in New Castle built a community playground - partly as an effort to battle childhood obesity - our goal was not for the children to go home to their own backyards to swing on a swing set alone. We envisioned a place where children of all ages and backgrounds could gather and enjoy the thrill of active play in a vibrant setting.

The Indiana trail network can be an integral part of improving the health of Hoosiers in every way - their physical health as well as mental, economic, environmental and social. If we want to get In Shape Indiana our trail networks and parks are an essential ingredient to the process. Our activities can recreate Indiana and lead the way to a healthy, vibrant place for Hoosiers to live and cherish.



In 2005 Governor Mitch Daniels launched the INShape Indiana initiative in response to growing health concerns related to the lifestyles of Hoosiers. Physical inactivity, poor nutrition and tobacco use are the three primary factors leading to a host of chronic diseases that affect the health, quality of life and financial stability of individuals, organizations and the State of Indiana.

The INShape Indiana initiative aims to encourage all Hoosiers to move more, eat better and give up smoking. The spirit of INShape Indiana is being implemented across each agency of state government and is joined in partnership by organizations, facilities and events with similar goals statewide.

Indiana ranks at or near the bottom in every negative health indicator, including physical inactivity. An effective trails system is vital to Governor Daniels' vision for a healthier Indiana. Regular physical activity comes naturally while using a trail for walking or bicycling. Ease of access to recreational infrastructure such as parks and trail systems in the State of Indiana is a large component to the activity level of citizens.

A plan for the statewide development of trails helps to improve access to trails across the state by encouraging connections across varied communities. Americans who live or work near well developed trails systems tend to be healthier and lead a higher quality of life. Therefore, expanding and connecting existing trails will serve to increase opportunities to become more active, thereby improving health and quality of life in Indiana.